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THIRTY-FIRST

ANNUAL REPORT

OF THE

State Board of Health  
of Florida

1920

Office of the Secretary and Main Laboratory  
State Board of Health Building  
Springfield Boulevard  
Jacksonville



**THIRTY-FIRST**

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## STATE BOARD OF HEALTH OF FLORIDA

HON. JOE L. EARMAN, President  
West Palm Beach

HON. ED. M. EARNEST  
Palatka

HON. J. E. GRAVES  
Quincy

DR. RALPH N. GREENE  
Secretary and State Health Officer

SAMUEL F. FLOOD  
Auditor

MISS FLORENCE SMITH  
Secretary to State Health Officer

*Bureau of Vital Statistics*  
DR. S. G. THOMPSON, Statistician

*Bureau of Diagnostic Laboratories*  
DR. B. L. ARMS, Director

*Bureau of Sanitary Engineering*  
MR. GEORGE W. SIMONS, JR., Chief Sanitary Engineer

*Bureau of Venereal Disease*  
DR. DANIEL C. CAMPBELL, Director

*Bureau of Child Welfare*  
DR. WILLIAM B. KEATING, Director

*Bureau of Publicity*  
MR. ARNOLD HEIDT, Director

*Multigraph Department*  
MR. ERNEST GANTON, Director

### DISTRICT HEALTH OFFICERS

DR. GEORGE A. DAME  
West Palm Beach

DR. F. L. TATOM  
DeFuniak Springs

DR. A. C. HAMBLIN  
Tampa



## LETTER OF TRANSMITTAL

West Palm Beach, Florida, December 6th, 1920.

*To His Excellency, Sidney J. Catts, Governor of Florida, Tallahassee, Florida.*

SIR:

Herewith, is attached annual report of the State Board of Health of Florida.

It is requested that you submit same to the Legislature.

Respectfully,

STATE BOARD OF HEALTH,  
By JOE L. EARMAN, President.





## REPORT OF THE STATE HEALTH OFFICER

Jacksonville, Florida, December Sixth, Nineteen Twenty.

*Honorable Joe L. Earman, President, State Board of Health,  
West Palm Beach, Florida.*

DEAR SIR:

I beg to submit, herewith, report of the activities of the State Board of Health of Florida, same to constitute the thirty-first annual report of the State Board of Health.

Attention is respectfully invited to the fact that the report for 1919 which was in order any time after February, 1919, was not published by my predecessor.

I became State Health Officer of Florida in July 1919.

Because of the necessary temporary disorganization incident to changing of administration I was not in position to offer opinions, advice, or reports during the year 1919.

### GENERAL CONSIDERATION

Attached, herewith, you will find brief reports from the heads of the different departments comprising the headquarters of the State Board of Health which are self-explanatory.

In a general way it has been the attitude of your executive officer to advocate only such programs and innovations as appeared to be constructive and of such nature as to warrant the expenditure of public funds with reasonable assurance of constructive results.

### LEPROSY

It became evident soon after I assumed the duties of State Health Officer of Florida that it was necessary for the State Board of Health to express an opinion as to the advisability of locating a national leprosy colony in the State of Florida.

The State Board of Health, upon being consulted by representatives of the United States Public Health Service, who comprised a Board to select a location for the colony, expressed the official opinion that upon medical grounds alone there could be no objections to the establishment of this colony within the confines of the State of Florida.

There was, however, a state-wide protest against the establishment of the colony because it was believed, and in which opinion the State Board of Health concurred, that the establishment of a hospital for the care of all the lepers in the United States,

We are practically assured of the almost complete success of the project and of the wisdom of the expenditure of all moneys connected therewith.

The Perry anti-malarial project is the largest anti-malarial work being conducted in the United States today and it is believed, bears the distinction of being the only anti-malarial crusade in America, up to date, in which has been applied all of the known means of malaria control, namely: oiling, screening, stocking ponds and waters with surface minnows, administration of quinine, and extensive drainage.

## CANCER

About two hundred and fifty deaths occur annually from cancer in the State of Florida.

It had been the hope and the desire of the present State Board of Health to provide means for the free treatment of indigent cancer cases in the State of Florida by perfecting arrangements for the payment of physicians who owned radium for the application thereof in these particular cases.

The matter was referred to the Attorney General for opinion as to the legality of expending State Board of Health money for this purpose.

The Attorney General in reply stated that he was heartily in favor of the proposed plan of activities for the elimination of cancer among the people of Florida but was unfortunately forced, on account of the construction of the law providing for the expenditure of funds of the State Board of Health of Florida, to give as his opinion that such expenditure was illegal.

## REPORT OF VITAL STATISTICS

It is believed that the statistical tabulations of the Bureau of Vital Statistics should not be incorporated in the annual report of the State Board of Health for the reason that it makes said report cumbersome and of particular interest to those who are interested in vital statistics alone and not to those who are interested in a report of the activities of the State Board of Health as a whole. It is therefore contemplated to publish the report of the activities of the Bureau of Vital Statistics in a separate publication.

Attached, herewith, you will find a brief report of the general activities of this Bureau, same being so formulated as to give general information about the department.

## LABORATORIES

A branch laboratory has been opened at Tallahassee, Florida, and will afford means of laboratory diagnosis for a large area of country particularly that south of the L. & N. and Seaboard Air Line Railways.

A branch laboratory is to be constructed in the city of West Palm Beach, Florida. With the erection of a laboratory building at West Palm Beach the first state institution for the east coast of Florida will have been completed.

Attention is invited to the report of Doctor B. L. Arms, Director of the Bureau of Diagnostic Laboratories.

It is believed that the chain of laboratories of the State Board of Health of Florida represents a tremendous asset for the people of Florida. The work has been somewhat limited and does not include all routine examinations that might be made and with which physicians practicing in the State could have more material assistance from these laboratories than they are now having.

## PUBLICITY DEPARTMENT

The publication of the Florida Health Notes was abandoned for the reason that it was believed that they were not being generally read and being limited in number, did not reach a sufficient number of the citizens of Florida.

The several newspapers of the State were subscribed to by the State Board of Health and a publicity department established whose head peruses all of the newspapers of the State for data which may be of interest in relation to public health.

Weekly news items have been sent out to the weekly and daily publications of the state with the result that we have been securing an average of seventy columns of publicity per month, which is far in excess of that represented by the Public Health Notes when it is taken into consideration that practically every citizen of the State of Florida has opportunity of reading the newspapers and consequently the advice and information sent out by the State Board of Health.

The newspaper publishers of the State are to be highly commended for their hearty spirit of co-operation which has enabled us to carry the message of public health into every remote corner of the State. Legal authority should be provided whereby this newspaper space can be paid for and not be begged.

## BUREAU OF VENEREAL DISEASES

The department, operating co-operatively between the State Board of Health of Florida and the United States Public Health Service, has accomplished a great good and afforded treatment to a very large group of sufferers from venereal diseases.

As will be noted from report from the Bureau of Venereal Diseases, the program is divided into three principal phases, namely: treatment, education and law enforcement.

It seems to me that we have not reached a high plane of development in our attitude towards prostitutes.

Prostitutes are usually feeble minded, it having been demonstrated by studies of the mental development of delinquent women that about sixty per cent of them are retarded mentally and consequently are unable to cope with society and with designing individuals with whom they come in contact.

It would appear that, in keeping with our higher ideals and civilization, the time is now ripe for the State to approach these people, not altogether in an attitude of a criminal prosecution, but rather for the purpose of isolating those who have venereal diseases in communicable stages and, while in custody for the protection of others, that they may be subjected to a mental study to determine if they are mentally deficient to a degree that renders them not only incapable of coping with society but a menace as carriers of venereal diseases and propagators of a defective species who can be nothing but a future burden to the State. These people would be far happier, the State would be safeguarded and the investment justified by placing them in a humanely conducted institution where they can be re-educated, if possible and if not, permanently segregated.

## HEALTH ORGANIZATIONS OTHER THAN THE STATE BOARD OF HEALTH

The basic law provides that all health activities in the State of Florida shall be under the direction of the State Board of Health of Florida.

As an aftermath of the war period, it is evident that many of the organizations that were created for the war activities are now overburdened organizations struggling for existence and have therefore invaded states all over America in their attempt to provide work for a large personnel.

It appears to me that these people should not be misunderstood for they are without doubt attempting to do a great work, but there should be, under all circumstances, a co-ordination of all public health efforts in the State under the direction of the State

Board of Health for the reason that organizations working separately can not function otherwise than to work at cross purposes and at an enormous overhead expense which could be avoided by the administration coming from the State Board of Health.

## TUBERCULOSIS

Attention is invited to the existence of tuberculosis in Florida to a degree which causes an annual death rate of approximately one thousand people.

In a general way, the rate for tuberculosis is lower in Florida than in most States.

Being a tourist State with climatic advantages which are being advertised all over the country, Florida is naturally predisposing itself to the ingress of a large number of tubercular patients who come without adequate means for maintenance and support while in the State.

The tuberculosis problem in Florida has been given a great deal of thought and a study has been conducted in co-operation with the National Anti-Tuberculosis Society who recommend that a central hospital be established for the care of at least eighty patients, twenty of each color and sex with provision for the future expansion of the institution if same should be deemed necessary.

It is estimated that the initial cost of erecting an institution of this kind will be three hundred and fifty thousand dollars, with an annual maintenance fund required of three hundred and fifty thousand dollars.

## CRIPPLED CHILDREN'S DEPARTMENT

Attention is invited to the report of Doctor J. Knox Simpson, Surgeon in Charge, Crippled Children's Department.

Doctor Simpson is a capable surgeon and has effected a great good in his particular department. For a time it was impossible to care for all of the cases but recently word has been sent to each applicant throughout the entire State that hospital facilities are now available and opportunity has been extended all to come into Jacksonville for free treatment at the hands of the State Board of Health.

## ESTABLISHMENT OF STATE HOSPITAL

Considerable publicity has been given to a proposal for the construction and maintenance of a State Hospital for the general medical and surgical care of the indigent poor of the State.

On account of the few free hospitals in the State it is desirable to have some place where cases, requiring hospital treatment, who are without funds, can be properly cared for.

In the upbuilding of a State conservation of human life is an element not to be neglected.

Civil organizations are recognizing the need for large hospitals in Florida.

The State is at a disadvantage because it is understood that there are no large well operated hospitals which afford charitable care for indigent poor with the exception, possibly, of the Catholic hospitals in Pensacola and Jacksonville and one or two small institutions elsewhere.

With the tuberculosis problem, cancer problem, crippled children's problem confronting the State and because of the lack of County Poor Farms and because of the knowledge that in many instances those who are debilitated and poor are sent to the Insane Asylum, not because they are insane, but because there are no other means available for taking care of them, it appears that the time has now arrived for the legislature to give serious consideration to the advisability of appropriating sufficient monies for the establishment of a large general hospital for the people of Florida.

## MEDICAL LEGISLATION

It appears to the writer that because of the fact of many legislatures having considered the problem of medical practice license act in the State of Florida and because there has never been a law enacted providing for a composite medical board or the control of the practice of midwifery that the main objection, namely, a suspicion that there is a desire to form a medical trust, might be easily overcome by putting the authority for issuing license to practice medicine in Florida regardless of sect or cult in hands of the State Department of Education.

The State Superintendent of Education with his associates could secure the assistance of physicians representing the State medical service and the different cults of medical science to furnish men to compose a board to pass upon the qualifications of applicants for license to practice medicine and midwifery in the State of Florida.

## STATE LUNACY COMMISSION

From time to time people who are charged with crime allege that they are unable to come to trial because of mental disease. The burden of the responsibility is in a general sense, upon the

defendant. His ability to show insanity or not depends to a certain degree upon his ability to secure competent medical advice with which to render opinions to the court.

It is realized that the right to the plea of insanity can not be removed from a defendant but it does seem that a State Lunacy Commission composed of at least three physicians who are by experience, qualified to pass upon mental diseases, could by advising courts of the present condition of a given defendant, avoid much useless expense, delay and defectiveness of criminal procedure and render a great service to the bar of the State.

In the event of a lunacy inquisition, an individual who is combatting declaration of insanity at the hands of the court, could have the opportunity of presenting his case to a State Lunacy Commission and of having said commission render an opinion to the trial judge for his consideration.

A State Lunacy Commission could likewise, in the event of an individual claiming to be improperly confined in a State institution, pass upon such cases and recommend retention or discharge.

### DISTRICT HEALTH OFFICERS

The personnel consisting of Doctor F. L. Tatom, DeFuniak Springs, Doctor A. C. Hamblin, Tampa, and Doctor George A. Dame, West Palm Beach, have covered the State of Florida "like the dew" and, of necessity, almost as lightly.

In the absence of local organizations it must be said that the activities of the District Health Officers have been limited to the control of communicable diseases, surveys for hookworm and malaria eradication, examination of children in public schools, rural sanitation, investigation of dairies, water supplies, housing and sewage disposal and educational measures.

Activities of District Health Officers and their expenses are usually measured wrongly from the viewpoint of the population served and not as it should be from both the population and the size of territory covered.

Florida is usually compared to States having something less than a million population when as a matter of fact for many purposes it should be compared to States having upward of sixty thousand square miles. The distance from Century to Key West in this State is more than one thousand miles. States like Rhode Island with a dense population and a small compact area can certainly accomplish a greater amount of health work from a given per capita expenditure than can a State like Florida.

A very considerable percentage of the time and expenditures of the District Health Officers in this State must necessarily be



spent in going from one activity to another and in every instance leaving work of a public health nature unfinished.

Another fact that enters into the consideration of the activities of the District Health Officers in this State is the lack of local organizations. In many of the counties there is considerable enthusiasm in public health work but no organized effort to co-operate with the State Board of Health. No local organizations exist that are responsible for follow-up work after their attention has been invited to defects and measures recommended for improvement.

Florida can not compete successfully with States having a health unit in each county, the unit consisting of a County Board of Health, a full time health officer and an adequate personnel of nurses and inspectors for routine and follow-up work.

A very important fact bearing upon the efficiency of District Health Officers is the lack of a State Sanitary Code. Physicians from this State are drawn from every other State in the Union with different ideas of sanitary laws and methods of controlling communicable diseases. There are as the result, frequent calls for District Health Officers to go to distant points for the purpose of confirming diagnoses and for instituting control methods for the eradication of diphtheria, smallpox, and similar conditions where, under a system of County Health Boards, it would be absolutely unnecessary and much loss of time and expense would be saved the people of Florida.

The District Health Officers should have a high degree of public health training particularly if it is contemplated for the future establishment of full time County Health Boards. Under the present arrangement District Health Officers and other employees are only allowed fifteen days leave of absence for recreational purposes out of each year. It is believed that a leave of absence of at least one month should be granted District Health Officers independent of their two weeks recreational leave during which time they should be required to attend recognized medical schools wherein they can pursue studies in public health work leading to a degree of Doctor of Public Health. This should be done entirely at the expense of the State Board of Health.

## BUREAU OF CHILD WELFARE

Attention is invited to the attached report of Doctor William B. Keating, director of the Bureau of Child Welfare.

Suffice to say, that under present conditions of operation of the State Board of Health of Florida it will be an utter impossibility to adequately examine school children throughout the entire State and institute the proper follow-up procedure.

The whole problem can be answered as can be answered practically every other problem by the legislature giving due consideration to the establishment of full time county health boards which with their personnel can easily and completely examine each and every school child in the State of Florida once each school year without additional expense and institute the proper follow-up procedures without additional expense, because of the fact that the County Health Officer with his nurse, Sanitary Inspector, and other personnel, will be full time employees anyway and any work they may do will not entail additional expense as is now the case with the State Board of Health. Not only does the attempt, which has been futile, to examine school children give no satisfactory results but it has completely disorganized the effort that is being made in routine work.

## RECOMMENDATIONS

It appears to be the opinion that although the State Health Officer is vested with a great amount of authority, that said authority in most instances would probably not stand the acid test of court procedure.

It is recommended therefore, that the laws governing public health activities in Florida and the rules and regulations of the State Board of Health, which are supposed to be, in effect, laws be carefully re-constructed and re-compiled and presented to the next legislature in order that they may be properly supported by the enactment of specific statutes which will leave no doubt as to the legality of same.

The salary of the State Health Officer and the salaries of the heads of some departments are inadequate.

Provision should be made by the legislature which will enable the State Board of Health to pay the State Health Officer and other employees salaries commensurate with their ability and training.

The State Board of Health in a general way is an organization which, with a central administration, is attempting to administer the health affairs of the entire State representing an area of approximately fifty-eight thousand square miles.

The gospel of public health as is being preached in every State in the United States is that of advocating the establishment of full time county health boards which shall operate under a strict State sanitary code and under the general direction of the State Board of Health.

Local citizens should be appointed to serve as a County Board of Health without compensation and should be authorized to employ a County Health Officer whose qualifications, and employ-

ment and discharge shall be approved by the State Board of Health. In this way a great deal of public health work that is now of necessity being neglected can be accomplished and it is believed that it can be accomplished successfully in no other way.

I desire to express to each and every one of my present associates my sincere appreciation for earnest and loyal and efficient co-operation. Many of the employees of the State Board of Health of Florida might, with profit to themselves, seek other avenues of a livelihood but there appears to have permeated the entire atmosphere of the organization a sense of devotion and love for public health work.

I desire to personally express to the President of the State Board of Health and to the members of the Board of Health my extreme appreciation for the earnest and constant effort of co-operation and support that has been manifested upon all occasions.

Respectfully yours,

RALPH N. GREENE,  
*State Health Officer.*

## REPORT OF ORTHOPEDIC DEPARTMENT

J. KNOX SIMPSON, M. D., Surgeon in Charge

Jacksonville, Fla., Dec. 7th, 1920.

*Dr. R. N. Greene,**State Health Officer,  
City.*

DEAR DOCTOR GREENE:

I beg to submit herewith my report of the activities of the Orthopedic Department of the State Board of Health for the year 1920.

I suppose it is perfectly natural for one to place a high degree of importance upon the particular department with which he is associated, and in this respect I plead guilty of being perfectly natural. The efficiency sheets however of most of the other departments obtain their relative positions of importance solely from a collection of rather cold, impersonal, scientific figures, showing—as they admirably do—the work done, and the results accomplished by that department; while this department, in order to impress one with the good work it has accomplished, should include in its report some of the more personal side of the work; the expressions of gratitude of the parents for having a crippled and almost helpless child reclaimed and placed in position to begin a new life with a wider and brighter horizon; the initial homesickness, the later stoical determination, and finally the happy victorious smile of the child who came in a cripple and left, as one of the little boys expressed it, "Looking like the other boys." It would however be manifestly impossible to include such a delineation of detail in a report which is to be a part of the general report of all departments, so I shall content myself with only a summary of the cases coming under the care of this department.

Total number of cases examined.....	45
Cases refusing treatment.....	1
(A case of Sarcoma of the Femur which refused an amputation of the leg)	
Cases denied admission.....	2
(Both cases of Mental Deficiency in addition to their physical deformities)	
Cases accepted for treatment.....	42
Cases treated as ambulatory cases in office.....	9
(1 Chronic Empyema and 8 Clubfeet, treated by gradual manual and cast correction)	
<hr/> Total number of cases treated in hospital.....	<hr/> 33

Of these there were deformities due to Infantile Paralysis, cases numbered.....	12
Talipes-equino-varus of one foot.....	7
(All operated upon, 5 cured of the deformity, and enabled to walk with the sole of the affected foot flat on the ground. Two cases still under treatment.)	
Talipes-equino-varus of both feet, and flaccid paralysis of one arm complete, and the muscles of the shoulder girdle of the opposite side.....	1
(This case died of Meningitis, four days after entering the hospital)	
Complete flaccid paralysis of both knees and both ankles....	2
(Massage and the application of braces enabled both of these children to walk with the aid of crutches)	
Complete flaccid paralysis of muscles of the back, one hip and one leg.....	1
(A properly applied brace enabled this child to walk without crutches)	
Flexion deformity of both knees and one ankle.....	1
(This child has walked only on her knees for nine years. She is now under treatment, having undergone one operation, and facing at least two more before she will be able to walk again)	
Diseases and deformities of the hip joint.....	7
Active Tuberculosis.....	3
(All now free of symptoms and the joint undergoing repair)	
Non-tuberculous infection of the joint.....	3
(Two cured and one died of Influenza Pneumonia, two months after an arthroplasty for ankylosis. He was about ready to go home with a perfectly normal hip when he contracted the disease)	
Dislocation of five years standing.....	1
Tuberculosis of the knee joint.....	1
Amputations of the leg above the knee.....	2
(Both for neglected Osteo-myelitis of the femur which had completely destroyed the lower end of the bone, and the knee joint. Both cured.)	
Right Inguinal Hernia.....	1
(Cured).	
Congenital Club Feet, Double.....	3
(All cured by tenotomies and corrective plaster casts and splints.)	
Flexion deformities of knee.....	4
One knee involved.....	2
Both knees involved.....	2

(All deformities cured by tenotomies, capsulotomies, and corrective casts and splints, except one who is still under treatment.)

Cleft palate and hare lip.....	2
(One double and one single. Both cured by operation.)	
Chronic Appendicitis and general muscular weakness.....	1
(Cured by removing the appendix plus tonics, nourishing food and fresh air treatment.)	

Due to the fact that the funds at our disposal for this department were only sufficient to keep eight cases in the hospital at one time, the necessarily long hospital residence required by this type of cases, and to the consequent long period of waiting to which the cases were subjected between the filing of their applications and their entrance into the hospital, some of the would-be beneficiaries of this service became discouraged, and failed to take advantage of it. This fact is supported by the following evidence:

There were sixteen application blanks sent out in response to letters of request for them, which were never filled out and returned.

There were five cases whose applications were on file, and who did not report for treatment after being notified by two separate letters to do so.

There are six cases pending which have each received one notice to report and have not done so to date.

Realizing that this would be the case, should any considerable number of names accumulate on the waiting list, the State Health Officer and I, endeavored early in the year to increase our capacity for handling cases by utilizing a part of the facilities of the Childrens Home Society for our convalescent cases. To this end we took the matter up with Mr. Fagg and the Executive Committee of the above organization, but the plan could not be put into operation. After our efforts along this line failed, and it became evident that our waiting list was increasing, I was given authority by the State Health Officer to write to all cases on the list and give them an opportunity to come into the hospital without further delay. This I did, and all cases coming in as a result have been accepted.

In conclusion, I will not recommend all the things which I would like to have done for this department during the coming year, but will mention only the most crying need. A home for the convalescent children, containing facilities for teaching classes, kindergarten and vocational training, and having in connection with it a corrective gymnasium, and play ground, where the children could be kept, trained, their general health built up, and hospitalization prevented after the immediate necessity for hospital treatment ceased to exist.

In closing, I wish to express my appreciation to the State Health Officer, and the President and members of the Board of Health for the splendid and whole-hearted cooperation which I have received at their hands in every thing I have tried to accomplish during the year.

Respectfully submitted,

J. KNOX SIMPSON,  
*Orthopedic Surgeon, State Board of Health.*

BUREAU OF VITAL STATISTICS  
STEWART G. THOMPSON, D. P. H., Statistician

FLORIDA NOW IN UNITED STATES REGISTRATION—DEATHS

Honest consistent effort will win. The United States Government, through the Bureau of the Census, has accepted the State of Florida into the Registration Area for Deaths. For a state to attain this distinction is an honor, to say the least. Our sister states, Alabama and Georgia, are making every effort to bring their mortality records up to standard in order that they may also be admitted. Thirty states have now been accepted, representing approximately 90,000,000 of the population of the United States.

Every State Bureau of Vital Statistics, must undergo a severe test and meet all the standards as set forth by the United States Bureau of the Census, before it is eligible for acceptance into the Registration Area. A Vital Statistics Law, conforming to the Model Law, must be on the statute books. The state must be divided into small registration districts, with a local registrar in each, and thus forming a complete net work of registration centers over the entire state. The efficiency of the director of the Bureau of Vital Statistics, his office methods, system of records, etc., are all carefully examined and taken into consideration during the test. Through the postmasters, rural mail carriers and ministers of the state, the government has established a system whereby it is possible for them to find the percentage of deaths that occur where no death certificate has been filed. Every state must show at least ninety per cent of the deaths registered, or it cannot be accepted.

With an understanding of the high standard required by the government, it is self-evident that those connected with the State Board of Health were more than delighted when in October of 1919, the State of Florida was accepted into the Registration Area for Deaths, and the records of the Bureau of Vital Statistics accepted by the government from January 1st, of the same year. The Florida mortality records will therefore appear in the annual publications from Washington, which are sent out not only to every state in the United States, but also to every country in the world where vital records are kept.

BIRTH REGISTRATION AREA

The total number of births registered since 1917, has shown an increase each year and plans are now under way to have every birth occurring in this State promptly registered. The United



States Bureau of the Census will be requested to test birth records some time during the coming year. All physicians and midwives are urged to do their part and file a birth certificate within ten days for every birth they attend. Failure to file birth certificates not only cheats our innocent babies of Florida out of their legal evidence of citizenship, but may cause all the birth records of the State to be left out by the government.

## POPULATION

The natural increase of population is the excess of births over deaths. Last year the natural increase of population for Florida as taken from our records was 7,223. Our birth registration has not been tested and we therefore assume that there are unreported births which would make this increase larger. Immigration is quite a factor, as the good points of Florida have been well advertised, and tourists coming down to this State often stay themselves or influence friends to make this their permanent home. On account of the date, December 5th, as set for the time this report must be completed, it will not be possible to show birth and death rates or statistical information relative to 1920 records. As stated elsewhere in this report, information relative to population, birth and death rates and health conditions in this State, will be gladly furnished on request.

## BIRTHS AND DEATHS

During the calendar year 1919, there were 13,151 original death certificates filed, 1,321 of which were for stillborn infants; 19,974 original birth certificates were also received and filed, 18,653 living births and 1,321 for stillbirths. This total of 33,125 birth and death certificates all bearing original signatures as prescribed by law and thus forming legal evidence for citizens of the State of Florida, have been carefully examined, arranged in chronological order in volumes of five hundred each, alphabetically card indexed for reference and placed in a fire proof vault as provided by statute.

## CASKET SALES

Every casket dealer in the State is required to make a monthly report of casket sales when he does not have direct charge of the disposition of the body. The monthly casket sales reports thus received are carefully checked against the death records, and in this way six hundred and ninety-eight original death certificates were secured last year that might otherwise have

been lost. The hearty cooperation of the casket dealers in this work is very much appreciated and has been instrumental in helping to make our records so complete that they were accepted as standard.

### OLD RECORDS

All the certificates of births and deaths that were received between 1865 and 1916, have been carefully arranged in chronological order trimmed to standard size as nearly as possible, put in volumes of five hundred each and nicely bound. We have just completed the card indexing of the death certificates received prior to the enactment of the Model Vital Statistics Law, and have made a good start on the indexing of the old birth certificates. When this alphabetical indexing of birth records is completed it will be a very simple matter to locate any original record now on file.

### SAFETY OF RECORDS

When the Model Vital Statistics Law was enacted in 1915, incorporated therein, was a provision that a fire proof vault be provided by the State Board of Health for the safe keeping of certificates. A vault for this purpose has just been completed which is ample for all records that will accumulate for many years to come, and is equipped with a heavy iron door with combination lock. Steel shelving has been ordered which will give us a finished vault when installed, that will house the vital records in a manner in keeping with the dignity of the great State of Florida.

### SANITARY USE

Without standard mortality records it would not be possible for us to state positively whether or not the health conditions in Florida are improving. When the State Health Officer proposed an Anti-Malaria Campaign to the State Board of Health, the first question asked was "In what part of the State is malaria most prevalent?" This question could be immediately and accurately answered, owing to the fact that a record had been made and tabulated by counties and cities of every death occurring from malaria. As Taylor County had more deaths from this disease per 100,000 population than any other county in the State of Florida, it was therefore an easy matter to decide where to make the first attack. Typhoid fever has been a serious problem in this State for many years. With the use of complete and standard records we are able to state that the typhoid fever death rate has decreased in Florida every year since 1916.

## LEGAL USE

The legal use of the records must not be overlooked in its order of importance. There is scarcely a day passes that we do not have a request for a certified copy of a birth or death certificate, which, according to the laws of this State is *prima facie* evidence in all courts for the facts therein stated. It is interesting to note the various reasons given for securing these certified copies; widows pensions, life insurance claims, railroad accident claims, passports, proof of age during the draft, proof of age to enter school and various others. In New York State, recently, the use of a certified copy of a birth certificate was the deciding evidence in a million dollar inheritance case being adjusted by the courts.

## TABULATIONS

For each certificate received a punch card is made, and by the use of sorting and tabulating machines, very complete and valuable records have been compiled, making it possible to give accurate information as to the number of births and deaths occurring in the State, any county or city, the number of deaths from typhoid fever, tuberculosis, malaria, venereal diseases, or, in fact any of the other one hundred and eighty-nine diseases listed in the International Classification of Causes of Death. It is also possible to give the age, sex, social condition, nativity, resident or non-resident of the decedent, and also to give the number of deaths occurring in any particular month, which is often necessary when taking into consideration deaths from certain causes when the seasons become a factor.

## DEATH RATE

Florida being a tourist state has caused many people to inquire concerning health conditions, asking questions similar to these: "Is Florida a good state in which to live?" "In what counties is malaria prevalent?" "Is there danger from typhoid fever in (.....) County?" "I am contemplating buying a tract of land in (.....) part of the State. Please let me know the death rates from different diseases in this locality." Beginning with 1917, we have very complete mortality records and have been able to give satisfactory answers to all questions covering this period.

## STATISTICAL PUBLICATIONS

As recommended by the State Health Officer no statistical tables will appear in this report. Many requests have been re-

ceived for statistical information. These requests have come from libraries, local health officers, tuberculosis associations, chambers of commerce and other organizations interested in the welfare of the different parts of the State. We hope to have a complete statistical report published later in order to supply those interested with information necessary to compare the health conditions of one part of the State with another as well as with other States.

### MORBIDITY

During the calendar year 1919, there were 24,884 cases of communicable diseases reported to the Bureau of Vital Statistics. The State Board of Health has declared thirty-eight diseases to be notifiable. Every physician in the State of Florida has been supplied with report cards and self addressed envelopes, and through the courtesy of the United States Public Health Service, franking privileges have been granted, so that communicable diseases may be reported without the additional cost of postage. A morbidity report is compiled each week, giving a resume of the prevalence of disease during the week and is sent out to every local health officer in the State of Florida. If every physician would cooperate in the reporting of diseases declared notifiable by the State Board of Health, every health officer in the State would have in his possession a weekly endemic index of health conditions that would be very valuable.

### USE OF WIRES DURING EPIDEMIC

During the epidemic and recurrence of influenza, the United States Public Health Service allowed us to issue telegrams at their expense, in order to get a daily telegraphic report on this disease. Through the chain of reports which started with the local health officer to the state health officer and the state health officer to the United States Public Health Service, it was possible to watch the spread of influenza from one side of the United States to the other and for all parts of our own State. In 1918 the epidemic broke so suddenly it was not possible to get the organization started as early as it should have been. However, during the early part of 1920, when the recurrence of influenza began, every state and local health official was duly advised as to the spread of the disease and could therefore have the opportunity to take all known steps for the protection of those for whom he was responsible.

## WEEKLY TELEGRAPHIC SERVICE

A telegraphic report of the prevalence of disease is sent to the Surgeon General, each week. This is published together with similar reports from other states and in this way each state health officer has a prompt report from other states and has the opportunity in this way to compare his own state with others.

## MARRIAGE LAW

The writer recommends the enactment of a law requiring the centralization of marriage and divorce records. This law should be so worded as not to detract in any way from the records in the office of the probate judge, but should provide a state record so that every marriage license issued in the State may be verified without the necessity of going into the records of every county to find where the marriage occurred.

## MORBIDITY LAW

The writer also recommends the enactment of a law governing the reporting of communicable diseases. The reporting of venereal diseases is provided for by statute and all other diseases now declared notifiable by the State Board of Health should be governed by statute.

## CONCLUSION

To measure anything it is necessary to have a unit value. Potatoes are measured by bushel or pound. Distances are measured by feet or miles. States are measured by, land area—square miles or acres, and population. Likewise health has a unit of measure. Health conditions are measured by Vital Statistics. The Bureau of Vital Statistics has to do with the collection, preservation, tabulation and interpretation of the records of births, deaths and cases of sickness. The State has been divided into six hundred registration districts. Physicians and midwives are required to file birth certificates within ten days with the local registrar. The undertaker or person acting as undertaker is required to file a death certificate with the local registrar and secure a burial or removal permit before a body is moved or interred. Where there are full time local health officers, physicians in the State are required to report notifiable diseases locally, otherwise, notifiable diseases must be reported to the State Board of Health. Statistics for births, deaths and notifiable diseases are fundamental to intelligent direction and definite effort for the prevention of disease and the promotion of health.

## BUREAU OF SANITARY ENGINEERING

GEORGE W. SIMONS, JR., Chief Sanitary Engineer

The work of the Bureau of Sanitary Engineering is divided into three well defined branches, namely, (1) field surveys and inspections; (2) laboratory examinations and special studies and (3) office consultation and advice.

Field surveys and investigations are directed mainly at the improvement and betterment of municipal and community sanitation, i. e., water supplies, sewerage, sewage disposal, refuse collection and disposal, swimming pool operation and control, housing, sanitary inspections and malaria and typhoid fever control operations. Laboratory activities consist of bacteriological and chemical examinations of water and sewage, also special studies incident to the conduct of field investigations. The office work consists largely of general consultation, examination and approval of engineering plans, preparation and distribution of technical reports, advisory correspondence, and the publication of booklets and placards pertaining to sanitation.

### WATER SUPPLY

To properly judge the sanitary quality of a public or private water supply a comprehensive survey of the source is necessary in conjunction with the analytical information provided by the laboratory. Therefore the entire equipment and facilities for the distribution of a water supply from the source to the consumer are carefully inspected. Defects which may in any manner affect health conditions are pointed out to the citizens with a recommendation for improvements. Oftentimes municipalities have sought advice and suggestions previous to the commencement of a water supply project. Intensive water supply investigations have been made at nine points since January first 1920.

Supplementing the investigations of municipal utilities, comprehensive inspections, laboratory examinations are made, and permits issued to bottled water concerns in accordance with Rule No. 69 of the State Board of Health. *During 1919, 21 plants were carefully investigated in Florida and certified as well as eleven from other parts of the United States.* The sanitary inspection of plants in states other than Florida were made by representatives of the Bureau of Chemistry, U. S. Department of Agriculture, but all state plants were inspected and passed by our Bureau. During the course of the year frequent sanitary inspections of plants are made. Samples of water as prepared for the market are collected and submitted to the laboratory for examination, every other month.

The bottled water industry in Florida has attained large proportions during the past two years, more bottled waters being prepared and sold now than ever. It is a phase of water sanitation receiving much study.

## WATER TREATMENT PLANTS

The disinfection of a public water supply by liquid chlorine is rapidly being recognized as an economical and efficient method of treating and insuring a water supply against chance contamination. It is a simple treatment process which is gaining headway among municipalities in Florida. During 1920 there were eight chlorinators in the State. Rule No. 73, passed by the State Board of Health during the last days of 1919 and effective early in 1920, requires each treatment plant to furnish the State Board of Health with a weekly statement showing detailed daily plant operation. *As a result of this ruling, every chlorination plant in the state has furnished the Bureau with complete daily operation reports since January first, 1920.* This reporting system is very satisfactory; it permits a close check on the operation, control and efficiency of these treatment devices. *Approximately eighteen million gallons of Florida drinking water are being treated every day with liquid chlorine.*

All chlorinating apparati are subjected to frequent inspection by a Bureau representative who notes continuity of operation, amount of dosage and existence of defects.

Treatment plant supervision also pertains to water filtration plants. A modern water filtration plant is a delicate mechanism and unless properly operated, gives a false sense of security. The preliminary treatment of water should especially be carefully watched. One filtration plant (Orlando) has been in operation during the past three years. A new plant is about to begin operation now (West Palm Beach). Before actual construction work was commenced on the latter plant, the plans were examined and approved by the Bureau and from time to time since April first, 1920, construction work inspected. The operation of all filtration plants is being done in strict accordance with recommendations and suggestions transmitted from the Bureau. These plants are subjected to frequent inspection to insure satisfactory operation.

The water supply problems in some portions of the State are becoming acute. The Bureau anticipating the future has been making a considerable study of water treatment as regards certain surface waters which may of necessity become municipal supplies. Treatment of water for color removal has been especially considered. The Bureau has been twice called upon

this year to assist in determining the best suitable means of treating municipal water.

## RAILROAD WATER SUPPLIES

In accordance with a Federal requirement that all water used for drinking on inter-state carriers must be certified to, the U. S. Public Health Service, through the State Board of Health, since January first, 1919, the bureau has investigated and carefully examined and certified to the U. S. Public Health Service ninety-one public water supplies as safe drinking supplies for *use on common carriers in Florida.*

During 1919 the U. S. Public Health Service made an investigation of State Health Board Engineering Departments throughout the United States, rating each state on its organization, personnel, ability and efficiency in making water supply survey investigations and certifications. *Of the 48 states, Florida stood 8th, with 865 points out of a possible 1000, and first among all Southern States.* This government rating considered alone, speaks well for the organization and activities of the Bureau.

During the past 18 months the Bureau has been frequently called upon to make intensive, detailed studies of the community water supply problems and their needs. Comprehensive reports have been given in each case following such studies.

## SEWERAGE

There is possibly no branch of public health endeavor of greater importance than the proper treatment and disposal of human wastes. This work relates to (1) municipal sewerage and sewage disposal plants; (2) sewerage and sewage disposal for industrial plants; (3) soil pollution and (4) the proper disposal of wastes at schools. *In Florida there are fifty-one municipal sewerage systems and twenty-two sewage treatment plants.* The latter are badly misunderstood by municipal authorities and because of this do not receive proper attention. Recognizing the situation relating to improper treatment plant operation, the Bureau, early in 1920, conducted a brief correspondence course for all those entrusted with sewage plant operation. The course treated mainly of the purpose of treatment and proper procedure to follow. The course interested the operators and succeeded in improving conditions at many places.

Municipalities have called upon the Bureau for intensive surveys and investigations in nine instances, at each of which complete detailed reports have been given. *These reports have dealt with the status of local sewage disposal, the needs of the com-*



*munity and the most economical method to secure most efficient results.* In some instances it has been necessary to make intensive stream pollution studies for the purpose of ascertaining the extent to which treatment should be considered.

A great awakening is evident among industrial concerns throughout the State, i. e., as railroad shops, lumber and phosphate camps, for the improvement of sanitary conditions relating to housing, waste and sewage disposal, also other sanitary matters. In a number of instances industrial companies have applied for and been given detailed advisory reports. They have also submitted improvement plans to the Bureau for approval and criticism.

The examination and approval of plans for sewerage and sewage disposal plants is being demanded by the municipalities throughout the state. *During 1920 at least six cities had plans approved before commencing work.*

Soil pollution activities instituted extensively during 1918 have been continued during 1919-1920 *with the result that thousands of improved, fly-proof privies are now constructed in accordance with plans recommended and approved by the State Board of Health.*

Intensive house to house surveys have been made in several communities and subsequently detailed reports submitted in each instance. Sanitary surveys of this type place before the community *a diagnosis of the ills from which it is suffering.* It shows the citizens exactly where they stand and further extends to them the necessary information for accomplishing better results. *In practically every instance where comprehensive surveys have been made, hundreds of privies have been installed by representatives of this Bureau and other effective improvements made.*

## OYSTER SANITATION

It is well known that oysters grow in waters which may be receiving sewage contamination and that oysters may easily become polluted and transmit organisms of infection. To protect growing oyster industries in Florida, the Bureau has, for months, made stream pollution and oyster pollution studies in the Halifax River in Volusia County. *This alertness of the State Board of Health assists in protecting oyster consumers as well as oyster growers. This work will be continued.*

## NUISANCES

A branch of activities calling upon the Bureau continually are those leading to the abatement of nuisances. Nuisances are from

a trivial to a serious nature but in nearly every instance an investigation is instituted and an earnest effort made to remedy or abate the situation.

### DAIRIES

During 1920 a branch of work requiring closest attention was that of dairy inspection. This opened a wide and fruitful field. *Intensive dairy investigations were instituted at nine points in the state, mainly at Tampa, and concerned the improvement of approximately three hundred dairies.* In many instances the rules and regulations of the State Board of Health were enforced and today stand in operation.

### SCHOOLS

School sanitation received considerable attention during the past eighteen months. Three notable county school surveys were completed and full reports transmitted to *Escambia County, Palm Beach County and Hillsborough County.* The latter survey was very comprehensive and the detailed report treated of conditions at eighty-five schools.

### RAILROAD SANITATION

Early in 1919 it became apparent that the railroad sanitation regulations of the State Board of Health were obsolete. Following a careful study it was deemed advisable to secure suggestions from various experienced railroad surgeons previous to the adoption of any definite rules. Therefore the Bureau extended invitations to the sanitarians and surgeons of all railroads entering Florida, also to Dr. Crowder of the Pullman Company, to attend a conference in Jacksonville. *Two conferences were held, each attended by representatives of the major railroads and the Pullman Company.* Subsequent to these conferences the present rules and regulations of the State Board of Health were adopted. *It is well to state that the rules finally adopted for use are those recommended to all States by the Conference of Public Health Officers in Washington, during 1920.* They will later be used in the several States, however Florida was the first state to adopt them.

### REFUSE COLLECTION AND DISPOSAL

Refuse collection and disposal, although primarily not a public health problem, is a phase of municipal house-cleaning necessarily requiring the attention of the Bureau. Many municipalities frequently request advice relative to proper systems for their use.

*It is well known that the cleanliness and health of a community is largely reflected by the status of its municipal house-cleaning, therefore, the matter of proper, systematic refuse collection and disposal is encouraged.*

### SWIMMING POOL SANITATION

The Legislature of 1919, at the instigation of this Bureau, passed a very important statute placing the sanitary control and operation of swimming pools under the guidance of the State Board of Health. *It has long been recognized that a dirty, carelessly operated pool is a menace to public health.* Florida has the distinction of being the second state in the nation to promulgate a statute regulating swimming pools, an act soon to be copied by many other states. The statute requires the inspection of all pools and their certification by the State Board of Health. *Sanitary inspections have been conducted at practically all pools throughout Florida during 1919 and 1920 and twenty-one pools have been certified in accordance with the statute.*

Detailed investigations and long time studies have been made upon several swimming pools *to ascertain the most proper and economical methods for their sanitary operation and control.* The collective results of these studies will eventually lead to the compilation and adoption of a sanitary code for the operation of all pools in the State and later the issuance of certificates will be dependent upon the compliance with these regulations.

### CAMP SANITATION

With the increase of railroad passenger rates during the summer of 1920 it readily became apparent that Florida's winter season would see more auto tourists and campers in the State than ever before. It therefore seemed advisable to compile and adopt a set of rules and regulations for the sanitary control of auto tourist camps. Previous to the advent of the tourist season this regulation was sent to all cities and towns with the request that all municipal camps be operated in accordance therewith. *Copies of the ruling were also sent to many Northern states for publication and the attention of prospective travelers.* Camps found not to conform with the regulations are closed. *This regulation was promulgated not only for the protection of the visitors' health, but primarily for the protection of the health of our own citizens.* It is well known that many travellers are recuperating or convalescing from illness, and the careless disposal of their human wastes might accidentally infect or impair the health of our citizens. This regulation is therefore considered to be a very important one.

## MALARIA CONTROL

Late in 1919 the State Board of Health undertook to execute measures for the control of malaria. To better observe the effectiveness of these measures a typical malaria section, near Perry, in Taylor County, was selected. A very extensive engineering program is now being conducted at this point under the supervision of the Bureau. *This work comprises the excavation of approximately 47,000 cubic yards of earth and the construction of five miles of ditches, varying in size from channels 8 feet wide to those 3 feet wide. The cost of the work will approximate \$25,000, \$15,000 of which has been devoted by the Town of Perry and \$10,000 by the Burton-Swartz Cypress Company. The engineering work is done by the Bureau, and the project has the distinction of being one of the largest of its kind in the entire South.*

In addition to the work at Perry, malaria control surveys have been made at eight other points in the State.

## SANITARY INSPECTIONS

No branch of sanitary work is perhaps of more value than the following-up and checking of sanitary conditions throughout the state, a work done by the Sanitary Inspectors. The Bureau has in its employ three inspectors whose duties approximate those of a sanitary police. They enforce the rules and regulations and statutes, make routine inspections throughout the state and abate nuisances. *The inspections include dairies, grocery stores, markets, restaurants, drinking stands, jails, schools, swimming pools and all premises from which cases of intestinal diseases have been reported.*

Thorough house to house surveys were made at several places during the year. During 1920 hundreds of privies were actually constructed at Lake City, Perry, White Springs, Macclenny and Raiford, as well as other points in the State. *The sanitary inspector is a valuable adjunct to this department.*

## LABORATORY WORK

The second branch of the work named in the opening paragraph relates to laboratory work. The laboratory of the Bureau *examines samples of water bacterially, chemically and microscopically.* In addition to the routine examinations of water and sewage, special investigations are often undertaken as for instance, (1) the removal of color from a water being considered for municipal supplies, (2) the removal of odor and gases from water, (3) the disinfecting power of certain chemicals, (4) the

removal of algae growths, (5) black water removal and (6) water softening.

*During 1919 the Bureau made 1127 examinations of water and during the first eleven months of 1920, 1196 examinations, also 60 oyster examinations. During 1919, 64 detailed chemical analyses were made and for the first eleven months of 1920, 93 chemical analyses. This increase for 1920 for chemical analyses is due to the fact that during the month of September, 1920, the Bureau employed the services of a chemist to assist in handling the volume of work coming to it. Following gives the laboratory work since 1916:*

	Shallow	Deep	Spring	Streams	Lake	Ice	Rain	S. Pool	Bottle Water	Dairy	Pullman	Lab. tap city water
1916 .....	47	125	9	15	1	3	1	...	...	..	...	...
1917 .....	167	447	23	9	23	2	1	6	...	..	135	569
1918 .....	340	530	17	42	..	1	15	250	235	27	...	200
1919 .....	187	327	28	7	11	5	7	48	296	61	...	150
1920 .....	250	392	41	15	4	3	4	256	171	..	...	...

1920, sixty oyster examinations. Totals for years 1916, 201; 1917, 1382; 1918, 1657; 1919, 1127; 1920, 1196.

The work of 1917 and 1918 was greater because of intensive cantonment inspections.

## OFFICE

The third branch of work has to do with the office. This can be sub-divided into three parts, (a) examination and approval of plans and specifications for water supplies, sewerage and refuse collection and disposal; (b) consultation services by correspondence relative to sanitary matter; (c) advice and conferences with municipalities and individuals relative to sanitation. Plans for septic tanks and privies are also prepared for use of the citizens in the State. *Detailed reports are issued for the use of citizens.* An educative part of the office work is the preparation and distribution of booklets and pamphlets relative to water, sewerage and sanitary subjects.

## RECOMMENDATIONS

In the light of past experience the following recommendations are offered:

1. The Legislature of 1921 should be induced to pass a statute giving the State Board of Health supervision and sanitary control over sewage disposal plants and water treatment plants in the state.

2. The Legislature should also be induced to pass a statute requiring that all plans for municipal sewerage, sewage disposal,

refuse collection and disposal, and water purification must be submitted to and approved by the Bureau of Engineering of the State Board of Health before work of construction can proceed.

3. The sanitary inspection division is doing a good work; it is accomplishing a popular work effectively. The number of inspectors should be increased to at least six in order to give all sections of the State efficient service. Three men for 52 counties is not enough. The inspectors should remain under the engineering bureau until such a time as county health boards are organized, at which time their services could be dispensed with.

4. During 1920 the amount of dairy inspection work has greatly increased. This is a field of work which should consume the entire time of a trained, experienced and practical dairy engineer. Such a man could conduct educational campaigns and instruct dairymen in the easiest, most economical and efficient ways of producing clean, safe milk.

### CONCLUSION

Sanitation, derived from the Latin word health, concerns the environment; Hygiene, derived from the Greek word health, concerns the personal physique and habits. They have one science in common, the science of health. *Preventive medicine for health protection calls upon two arts, that of the physician and that of the sanitary engineer.* As will be seen from the foregoing report, the art of the engineer deals mainly with the environment, the water supplies and sewers, plumbing and ventilation, drainage and housing. The engineer and physician work arm in arm for the health betterment of the human race.

The foregoing report is brief, it is fragmentary, but in its way it tells of the work confronting the Engineering Bureau. Space does not permit an elaboration of many interesting and important details. But underlying this abstracted report are *recorded deeds, reports and records which may be examined or consulted by any person interested.* The Bureau will be glad to furnish minute details relative to any part of the work on request.

Summarizing the foregoing the following salient points stand out:

- (1) The high rating of the Bureau by the U. S. Public Health Service.
- (2) Florida was the first to adopt modern railroad regulations.
- (3) Florida was the second state to pass a swimming pool statute.
- (4) Florida was alert to the need of the traveling tourist.
- (5) Florida is waging one of the biggest anti-malaria fights in the country.
- (6) Florida is protecting the oysters of the state.

## BUREAU OF DIAGNOSTIC LABORATORIES

B. L. ARMS, M. D., Director

Jacksonville, December 1, 1920.

*Dr. Ralph N. Greene,**State Health Officer,**Jacksonville, Florida.*

MY DEAR DR. GREENE:

In accordance with your instructions, the following report of the work of the laboratories for the year 1919 and the first ten months of 1920 is submitted.

In order to comply with your request for a brief report, it has been necessary to omit details showing the total of each kind of examination made and the reports of the intensive hookworm work done in Brevard, Marion, Alachua, Hillsborough, Columbia, Suwanee, Escambia, Palm Beach, Lake and Taylor Counties.

During the year 1919 there was a great increase in volume of work done in each of the laboratories, there being an increase of slightly over 50 per cent in the number of examinations as compared with the previous years. The total number of examinations made in 1918 was 30,536, and in 1919 the total number was 47,693.

That this was a healthy continuing growth is evidenced by the fact that during the first ten months of 1920 there were 45,466 routine examinations made. This does not include any of the examinations of rats, but simply the same kind of tests in order to make the routine reports comparable year by year. When plague was found to exist in Pensacola last June, all vacation plans for members of the laboratory division were given up, and during the months of June, July and August, 8166 rats were examined in the various laboratories (this, of course, does not include the rats examined by the U. S. P. H. S. at Pensacola), and at the Central Laboratory 387 were examined in September and October, making a total of 8553 rats, none of which were found to be infected with plague.

Facilities were given the U. S. P. H. S. at Pensacola to make their examinations of rats in the laboratory building, and close cooperation has been maintained.

In spite of the great increase in volume of work, it has been carried on by the same number of workers, and it was only by the whole-hearted cooperation of every member of our force that we were able to meet the extra demands that these examinations made.

*Table Showing Number of Examinations at Each of the Laboratories*

	1918	1919	10 mos. 1920	Rats (1920)
Jacksonville . . . . .	17,423	28,587	26,018	5,287
Tampa . . . . .	7,792	11,937	13,010	2,376
Pensacola . . . . .	2,756	4,327	2,894	133
Miami . . . . .	2,565	2,852	3,544	757
	<hr/> 30,536	<hr/> 47,693	<hr/> 45,466	<hr/> 8,553

Respectfully submitted,

B. L. ARMS, M. D., Director,  
*Bureau of Diagnostic Laboratories.*



## BUREAU OF CHILD WELFARE

W. B. KEATING, M. D., Director

November 29, 1920.

*Doctor Ralph N. Greene,**State Health Officer,**Jacksonville, Florida.*

DEAR DOCTOR:

In compliance with your request, I submit herewith, a short report of the activities of the Bureau of Child Welfare for the year 1920.

Because of the limited personnel, it has been impossible to carry on the work in all the branches coming within the scope of this department. The work therefore, has been confined to those lines which promised the greatest amount of good for the efforts made.

The law requires that every school child in the state be examined as to its physical condition, at least once a year. There is an average yearly enrollment of three hundred thousand children and the average is constantly increasing. It will be readily seen that in order to carry out the provisions of this law, more money than is now available, must be provided and a larger working force is necessary.

An effort was made to carry out the provisions of this law—about thirty-five thousand children were examined at the following places:

Hillsborough County.....	15,755
Palm Beach County.....	2,821
Escambia County.....	9,219
Brevard County.....	900
Murray Hill.....	88
Murray Hill.....	75
Lackawanna .....	365
Panama Park.....	279
Tallahassee .....	1,492
Perry .....	560
Quincy .....	550
Palatka .....	900
Lee County.....	1,879
Total.....	<hr/> 34,881

Fifty-three thousand, nine hundred and thirty defects were found, notifications of which were sent to the parents of these children.

In an effort to educate the midwives of the state in the necessity of the use of proper sanitary measures when in attendance on mothers during childbirth, a sanitary obstetric package was made up, consisting of two sterile gauze pads, umbilical tape, and an ampoule of Silver Nitrate. One of these packages was sent to every midwife (3330) together with a printed list of instructions on the proper care of the child and mother during this time. The packages were issued free of charge and reissued upon request.

A survey of several counties by Doctor McMullen, a trachoma expert from the United States Public Health Service, revealed the fact that trachoma was quite wide-spread among the school children. As a result of this survey, a trachoma clinic, consisting of a doctor and one nurse, was organized and clinics held throughout the State in an attempt to eradicate this disease. Clinics were held in the following places: Jacksonville, Palatka, St. Augustine, Bunnell, Daytona, Fort Pierce, West Palm Beach, Fort Lauderdale, Miami, Key West, St. Petersburg, Clearwater, Melbourne, Cocoa, Eau Gallie, Hopkins and Chattahoochee, and free treatment was given to four hundred and seventeen persons.

A pamphlet, containing a short resume of the diseases most prevalent among school children and general information on health matters, was made up and sent to every school teacher in the state. The causes of these diseases, their mode of transmission and measures necessary for their prevention were stressed, the object being to educate the child in the preservation of good health and through the child to reflect these lessons into every home. This pamphlet had the approval of the State Superintendent of Public Instruction and the State Health Officer.

The physical examination of the school children shows a high percentage of defects among them, most of which are correctible.

About 80 per cent of the children in the rural districts have defective teeth.

In these districts, dental attention is often impossible to secure, there being no dentists available and many of the parents are financially unable to send their children to the city to have this work done. The establishment of traveling dental clinics to do the work and to give lectures on dental hygiene in these districts would help very materially in improving the health of these children.

A larger personnel for this department is necessary, if the work is to be carried on successfully. Nurses and welfare workers are vitally needed for follow-up work.

Very little attention has been paid by the parents to notifications sent them relative to physical defects in their children. This may be due to indolence on their part or to the lack of necessary funds.

Field workers would aid greatly in finding ways and means of helping these children.

Respectfully submitted,

W. B. KEATING,  
*Director, Bureau of Child Welfare.*

## BUREAU OF VENEREAL DISEASES

D. C. CAMPBELL, M. D., Director

The aim of the Bureau of Venereal Diseases of the Florida State Board of Health is three-fold.

First, to afford treatment for the unfortunates who have contracted venereal diseases that are not financially able to avail themselves of medical care. To meet this need, it has been necessary to establish clinics in the leading cities and towns of Florida. At the present time, we have twelve stationary clinics located as follows: Jacksonville, Doctor F. C. Jones; Fort Pierce, Doctor H. D. Clark; Miami, Doctor J. C. Turner; West Palm Beach, Doctor C. M. Conkling; Delray, Doctor J. R. Cason, Jr.; Key West, Doctor E. C. Lowe; Tampa, Doctor J. A. Barnes; Arcadia, Doctor J. H. Coffee; Lake City, Doctor T. H. Bates; Pensacola, Doctor S. R. Mallory Kennedy; Sanford, Doctor R. E. Stevens and Hosford, Doctor B. F. Smart. Realizing the great loss of time and suffering among the laboring people of the State and that a number of these large plants are not so situated that they can have access to the clinics, we have thought it wise to establish an Ambulatory clinic that could work on a regular outlined itinerary in these industrial centers that will offer treatment of the most scientific nature that can be provided to these unfortunates. This clinic has now been in operation more than twelve months, and the good accomplished is phenomenal. During the past twelve months, this one clinic has treated about fifteen hundred venereals, relieving them of their diseases and thus enabling them to be restored to health and full earning capacity. In all we have treated ten thousand, eight hundred and ninety-seven cases. We have administered twelve thousand, four hundred and eighty doses of Arsphenamine.

Second: The second phase of our program is educational. During the past twelve months, we have circulated more than seventy-five thousand pamphlets to the citizens of Florida dealing with the subject of sex education and venereal diseases. We secured, through the United States Public Health Service, a lecturer for the negro population of the State who addressed more than seventeen thousand negroes on the subject of sex relations, sex education and venereal diseases. We find that this man, whose salary and expenses were paid by the United States Public Health Service, was a great benefactor to the negro population of Florida. In co-operating with the Young Men's Christian Association, we have been fortunate enough to carry the message of "Keeping Fit" to about two thousand, five hundred boys between the age of fourteen and twenty. This is one phase of the

program that we have not been able to cover as fully as we would like to have done, therefore recommend that for the coming year this work be extended so that each boy in Florida will have an opportunity to read the pamphlet "Keeping Fit," to see the card exhibit which is a wonderful lesson in itself and to hear an address on a subject that is of vital importance to him. Also recommend that girls of like ages be included in this program and that a competent and qualified person be put in charge of this work. Each patient and all other people interested who have requested literature or information have received same, either from the clinician or from this office.

Third: Law Enforcement. The subject of law enforcement is one of the greatest handicaps that we have in this work. It takes long and patient propaganda to make the people who have this work in charge to see the necessity of abolishing prostitution which is the greatest source of infection that we have to contend with. We have been able in a number of points in Florida to secure this help and in each case we were able to lower the venereal rate materially. Would recommend that more time be devoted to law enforcement and that the people be educated to the necessity of this vital point.

Respectfully submitted,

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